

PROPOSED DETERMINATION UNDER THE PLENARY POWERS,  
OF THE AUTHORSHIP OF, AND OF THE ORIGINAL REFERENCE  
FOR, THE NAME "FILARIA VOLVULUS" (CLASS NEMATODA)  
AND PROPOSED VALIDATION UNDER THE SAME POWERS OF  
THE EMENDATION FROM "VOLVULAS" TO "VOLVULUS" OF  
THE SPECIFIC NAME OF THIS SPECIES

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I wish to present for the decision of the International Commission on Zoological Nomenclature the following case concerning the name "*Onchocerca volvulus* (Leuckart, 1893) Railliet and Henry, 1910".

2. In the course of preparing a manuscript relative to human onchocerciasis, I was unable to find Leuckart's original description of the filarid worm causing the disease. Most texts and research papers list the species as given in the above title, neglecting to give the source in the respective bibliography. Thus, in the Appendix (: 313) of the "Bibliography of Onchocerciasis", (*Publication No. 242 of the Pan-American Sanitary Bureau*) published in March, 1950, a reference is given for Leuckart, stating that he is quoted by Manson in an article "Skin Diseases" in Davidson's *Textbook of Hygiene and Diseases of Warm Climates* (: 963) (no date given). Fantham, Stephens, and Theobald (1916) on page 808 of *The Animal Parasites of Man* give their reference as follows: "Leuckart, R. (in Manson, P.). Diseases of the skin in tropical climates; Davidson: Hygiene and Diseases of Warm Climates, Edinb., London, 1893, p. 963." In the "Index Catalogue of Medical and Veterinary Zoology (Roundworms)", published in 1920 in *Bulletin No. 114 of the United States Public Health Service Hygienic Laboratory*, Stiles and Hassall (: 495) list this same reference as the earliest one for *volvulus*, while giving a still earlier reference (1892—see below) for the name *volvulas*, considering this to be an error for *volvulus*. J. H. Sandground in 1934, in Part 2 (: 138) of Strong, Sandground, Bequaert, and Ochoa, "Onchocerciasis with Special Reference to the Central American Form

of the Disease" (Contribution No. 6, Dept. Trop. Med. and Inst. Trop. Biol. and Med., Harvard University) states: "Under the name of *Filaria volvulus*, Leuckart in 1893 presented a brief description of a parasite that occurred in prominent nodules under the skin of natives in the Gold Coast of Equatorial West Africa". This would infer that Leuckart actually published a description but this is not the case. Various other authors give the reference for Leuckart's description as "Leuckart, R., 1893, Die Parasiten des Menschen und die von ihnen herrührenden Krankheiten. Ein Hand und Lehrbuch für Naturforscher und Aerzte. 2 Aufl. Leipzig". This volume contains no discussion whatsoever of *Filaria volvulus*. Railliet and Henry, in "Les onchocercques, nematodes parasites du tissu conjonctif" (1910, *Compt. Rend. Soc. Biol.*, Paris, 68 (No. 6) : 248-251 (250-51)) transferred the species from the genus *Filaria* Müller to *Onchocerca* Diesing, but gave no reference to the original description of the species other than the listing as "*Onchocerca volvulus* (Leuckart, 1893).—Syn. : *Filaria volvulus* Leuckart, 1893". To settle this problem, a study of the literature was undertaken, and the following information was secured.

3. The parasite was first mentioned in the literature by Sir Patrick Manson in an article entitled: "The geographical distribution, pathological relations, and life history of *Filaria sanguinis hominis diurna* and of *Filaria sanguinis hominis perstans*, in connexion with preventive medicine", which appears in the *Trans. 7th Internatl. Cong. Hyg. and Demog.*, London, August 1891, 1 (Sect. 1) : 88. The date of this article is somewhat confused. Included on the title page is the year "1891" for the time when the Congress took place; the year "1892" is given as the date of printing and "December 1892" for the date of transmittal. In view of the importance of ascertaining the exact date of publication of Manson's paper containing the name *Filaria volvulus*, I have made a special investigation of this subject with the help of the Library of Congress. I find that the printing of volume 1 (Section 1) of the *Trans. Int. Congr. Hyg. Demogr.* was authorised at the end of 1891, but that a fire in the printing office caused a delay with the result that work could not get started until well into 1892. Volumes 1 to 4 (which in library copies are usually bound up together) were published as separate units towards the close of 1892, while the remaining nine volumes of the Congress were not published until 1893. I find also that the numbering of the Congresses does not always correspond with the appropriate *Transactions*, since at one point there was a change in the numbering system. Thus, the Congress with which we are here concerned may be known either as the seventh or as the ninth of the series. It has been suggested to me by the Library of Congress that the reference for *Filaria volvulus* in Manson's paper should be given as follows:—*Trans. Seventh Int. Congr. Hyg. Demogr.* London, August 1891 vol. 1, Section 1, p. 88, 1892. Manson's discussion of the parasite in the foregoing paper was based on information and slides sent to him by Leuckart. It cannot be ascertained from the literature whether the spelling *volvulus*, as used in this paper, was the result of a typographical error or was actually the spelling used by Leuckart or Manson.

4. The above "original description" is mentioned by Railliet in the Second Edition of his *Traité de Zoologie médicale et agricole* (: 522) published in 1893, where however he erroneously spelled the name as *Filaria volvulus*. Railliet, however, gave the date of Manson's article as "1893", rather than as "1892", the date given by Stiles and Hassall which is now seen to be correct.

5. Manson discussed this parasite again in 1893, this time in his paper entitled "Diseases of the Skin in Tropical Climates" which forms Chapter 24 (: 928-995) of the work *Hygiene and Diseases of Warm Climates* edited by Andrew Davidson. In this paper the name of this parasite appeared (: 963) as *Filaria volvulus*. This is the reference which is usually cited for the original description of this parasite, the earlier paper in the *Trans. Seventh int. Congr. Hyg. Demogr.* being overlooked.

6. In 1896, R. Blanchard, in his "Animaux parasites", published in the *Traité de Pathologie générale* (Bouchard) (2 : 649-810 (783)), gave a short description of the worm and used the presently accepted spelling of *volvulus*. Labadie-Lagrave and Deguy offered a description of a single female, based on histological preparations, published in an article entitled "Un cas de *Filaria volvulus*", published in the *Archives de Parasitologie*, 2 (No. 3) : 451-460, 1899. The first extensive description of the adults and embryos of the parasite was given by W. T. Prout in "A filaria found in Sierra Leone. ?*Filaria volvulus* (Leuckart)" (1901, *Brit. med. J.* 1901, 1 : 209-211).

7. By common acceptance of all authors subsequent to Manson, this species has been known by the name *volvulus* and that name has been credited to Leuckart. Great and quite unnecessary confusion would result if this name were to be credited to any other author or if its spelling were to be changed. It is accordingly recommended that a Ruling be given by the Commission that this name in the combination *Filaria volvulus* be attributed to Leuckart and be treated as having been published by him in 1892 in Manson's paper on *Filaria sanguinis hominis diurna* and *Filaria sanguinis hominis perstans*, to which reference has already been made. As has already been explained, this name appeared in the paper referred to above with the spelling "volvulus" and it is part of the present proposal that this spelling should be replaced by the currently accepted spelling "volvulus". It is recognised that under the decisions in regard to the emendation of names taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the use of the Commission's Plenary Powers will be needed in order to validate the spelling "volvulus" as the name for this species. As regards the authorship of this name, it seems likely that, although Manson obtained it from Leuckart, the manner in which it was published by Manson in the paper in question is such that under the *Règles*, it should be attributed to that author and not to Leuckart. It is suggested therefore that, when dealing with this portion of the present application, the Commission should also do so under its Plenary Powers.

8. For the reasons set forth above, the International Commission on Zoological Nomenclature is asked :—

(1) to use its Plenary Powers :—

(a) to direct that the name *Filaria volvulus*, as published in 1892 in a paper by Manson entitled "The geographical distribution, pathological relations and life history of *Filaria sanguinis hominis diurna* and of *Filaria sanguinis hominis perstans* in connection with preventive medicine" (*Trans. Seventh int. Congr. Hyg. Demogr.* 1 (Sect. 1) : 88) be attributed to Leuckart (K.G.F.R.) ;

(b) to approve the emendation to *volvulus* of the name *volvulus* Leuckart, [1892], as published in the combination *Filaria volvulus* ;

(2) to place the specific name *volvulus* (emend. of *volvulus*) Leuckart, [1892], as published in the combination *Filaria volvulus*, on the *Official List of Specific Names in Zoology*, with a note specifying the decisions proposed under (1) above to be taken under the Plenary Powers ;

(3) to place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—

(a) *volvulus* Leuckart, [1892], as published in the combination *Filaria volvulus* (an Invalid Original Spelling for *volvulus*, under the Ruling proposed under (1)(b) above, to be given under the Plenary Powers) ;

(b) *volvulans* Railliet, 1893, as published in the combination *Filaria volvulans* (an Erroneous Subsequent Spelling for *volvulus* (emend. of *volvulus*) Leuckart, [1892], as published in the combination *Filaria volvulus*) ;

(c) *volvulus* Manson, 1893, as published in the combination *Filaria volvulus* (an Erroneous Subsequent Spelling for *volvulus* (emend. of *volvulus*) Leuckart, [1892], as published in the combination *Filaria volvulus*).